

IN THE CLAIMS:

Claims 12, 13, 15, 16, 47, and 53 have been amended herein. Claims 46, 49, and 54 have been canceled. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Previously Presented) A rate controlling membrane for an implantable drug delivery device characterized by being subjected to an elevated temperature of about 30° C to about 5° C below the melting temperature of the membrane for a predetermined period of about 1-250 hours and subsequently incorporated into the drug delivery device.

2. (Canceled)

3. (Previously Presented) The rate controlling membrane according to claim 1 wherein the membrane comprises a polyurethane or a polyether blocked amide copolymer.

4-9. (Canceled)

10. (Previously Presented) The rate controlling membrane according to claim 3 wherein the membrane comprises a polyurethane.

11. (Previously Presented) The rate controlling membrane according to claim 1 wherein the membrane is positioned in sealing relationship with an internal surface of one end of an impermeable reservoir of a fluid-imbibing drug delivery device, wherein the impermeable reservoir contains a piston that divides the impermeable reservoir into a drug-containing chamber and a water-swellaable agent-containing chamber, wherein the water-swellaable agent-containing chamber is provided with an outlet which accommodates the membrane.

12. (Currently Amended) The rate controlling membrane according to claim ~~11~~ 1 further comprising a drug-containing chamber.

13. (Currently Amended) The rate controlling membrane according to claim 1 wherein the elevated temperature is about ~~45—80~~ 45 to about 80° C and the predetermined period is about 1 - 75 hours.

14. (Previously Presented) A rate controlling membrane for an implantable drug delivery device characterized by being subjected to an elevated temperature of about 30° C to about 5° C below the melting temperature of the membrane polymer for a predetermined period of about 1 to 250 hours and subsequently incorporated into the delivery device wherein the membrane is cooled to ambient conditions before being incorporated into the delivery device.

15. (Currently Amended) The rate controlling membrane according to claim 3 wherein the elevated temperature is from about ~~52—to~~ 52 to about 72° C and the predetermined period is about 2 - 36 hours.

16. (Currently amended) The rate controlling membrane according to claim 10 wherein the elevated temperature is from about ~~55—to~~ 55 to about 75° C and the predetermined period is about 12 - 48 hours.

17. (Previously Presented) A method for processing rate controlling membranes used in implantable drug delivery devices comprising:

a) allowing the membrane to relax at room temperature for about 12 hours to 7 days before being subjected to elevated temperature;

b) exposing the membrane to a predetermined temperature of from about 30° C to about 5° C below the melting temperature of the membrane polymer;

c) maintaining the membrane at the predetermined temperature for a period of time of from about 1 to 250 hours; and

d) incorporating said membrane into a controlled drug delivery device.

18. (Original) A method according to claim 17 wherein the predetermined temperature is from about 45° C to 80° C.

19. (Original) A method according to claim 18 wherein the membrane is maintained at the predetermined temperature for a period of time of from about 1 to 75 hours.

20. (Original) A method according to claim 17 wherein the membrane is cooled to ambient conditions over a period of time of about 0.1-150 hours prior to incorporating the membrane into the device.

21. (Canceled)

22. (Previously Presented) A method according to claim 17 wherein the membrane is formed from a material selected from the group consisting of polyurethanes and polyether blocked amides copolymers.

23-27. (Canceled)

28. (Original) A method according to claim 17 wherein the membrane is allowed to set at ambient conditions for a period of at least about 12 hours after processing prior to exposing the membrane to said predetermined temperature.

29. (Original) A method according to claim 28 wherein the membrane is allowed to set at ambient conditions for a period of at least 48 hours after processing prior to exposing the membrane to said predetermined temperature.

30. (Original) A method according to claim 17 wherein the membrane comprises polyurethane.

31. (Currently Amended) A method according to claim 30 wherein the predetermined temperature is about 55-75° C and the period of time is about ~~12-48~~ to about 48 hours.

32. (Original) A method according to claim 31 wherein the membrane is positioned in sealing relationship with an internal surface of one end of an impermeable reservoir of a fluid-imbibing drug delivery device, wherein said fluid imbibing drug delivery device comprises an impermeable reservoir containing a piston that divides the reservoir into an active agent containing chamber and a water-swellaable agent containing chamber, wherein the water-swellaable agent containing chamber is provided with an outlet which accommodates said membrane.

33. (Original) A method according to claim 32 wherein the membrane is plug-shaped.

34. (Previously Presented) The rate controlling membrane according to claim 1 wherein the membrane comprises a polyether blocked amide copolymer.

35. (Previously Presented) The rate controlling membrane according to claim 10 wherein the polyurethane is a single aliphatic polyether polyurethane or a blend of aliphatic polyether polyurethanes.

36. (Previously Presented) The rate controlling membrane according to claim 11 wherein the drug-containing chamber comprises an opioid analgesic drug.

37. (Previously Presented) The rate controlling membrane according to claim 11 wherein the drug-containing chamber comprises an antiviral drug.

38. (Previously Presented) The rate controlling membrane according to claim 11 wherein the drug-containing chamber comprises an antineoplastic drug.

39. (Previously Presented) The rate controlling membrane according to claim 10 wherein the membrane is allowed to relax at room temperature for about 12 hours to 7 days before being annealed.

40. (Previously Presented) A rate controlling membrane for an implantable drug delivery device characterized by being subjected to an elevated temperature of about 30° C to about 5° C below the melting temperature of the membrane polymer for a predetermined period of about 1 to 250 hours and subsequently incorporated into the delivery device wherein the membrane is allowed to relax at room temperature for about 12 hours to 7 days before being annealed.

41. (Previously Presented) A rate controlling membrane for an implantable drug delivery device characterized by being subjected to an elevated temperature of about 52° C to about 72° C for a predetermined period of about 2 to 36 hours and subsequently incorporated into the drug delivery device.

42. (Previously Presented) A rate controlling membrane for an implantable drug delivery device characterized by being subjected to an elevated temperature of about 52° C to about 72° C for a predetermined period of about 2 to 36 hours and subsequently incorporated into the delivery device wherein the membrane is cooled to ambient conditions before being incorporated into the delivery device.

43. (Previously Presented) A rate controlling membrane for an implantable drug delivery device characterized by being subjected to an elevated temperature of about 52° C to about 72° C for a predetermined period of about 2 to 36 hours and subsequently incorporated into the delivery device, wherein the membrane is allowed to relax at room temperature for about 12 hours to 7 days before being subjected to an elevated temperature.

44. (Previously Presented) A rate controlling membrane for an implantable drug

delivery device characterized by being subjected to an elevated temperature of about 52° C to about 72° C for a predetermined period of about 2 to 36 hours and subsequently incorporated into the delivery device wherein during processing the membrane is dried to about 0 to about 1 % moisture content before being annealed and wherein the membrane is kept at about 0 to about 1% moisture content during annealing.

45. (Previously Presented) A rate controlling membrane for an implantable drug delivery device characterized by allowing the membrane to relax at room temperature for about 12 hours to 7 days before being annealed; subjecting the membrane to an elevated temperature of about 52° C to about 72° C for a predetermined period of about 2 to 36 hours; and cooling the membrane to ambient conditions before being incorporated into the delivery device.

Cancel claim 46.

47. (Currently Amended) The rate controlling membrane according to claim 10 wherein the elevated temperature is from about ~~50~~ to 50 to about 80° C and the predetermined period is about 4 hours — to about 72 hours.

48. (Previously Presented) A method for processing rate controlling membranes used in implantable drug delivery devices comprising:

- a) allowing the membrane to relax at room temperature for about 12 hours to 7 days;
- b) exposing the relaxed membrane to a predetermined temperature of from about 30° C to about 5°C below the melting temperature of the membrane polymer;
- c) maintaining the membrane at the predetermined temperature for a period of time of from about 1 to 250 hours; and
- d) incorporating said membrane into a controlled drug delivery device.

Cancel claim 49.

50. (Previously Presented) A method according to claim 17 wherein the membrane comprises polyether blocked amides copolymers.

51. (Currently Amended) A method according to claim 50 wherein the predetermined temperature is about 55-75° C and the period of time is about 12—~~48~~ to about 48 hours.

52. (Previously Presented) A method according to claim 51 wherein the membrane is positioned in sealing relationship with an internal surface of one end of an impermeable reservoir of a fluid-imbibing drug delivery device, wherein said fluid imbibing drug delivery device comprises an impermeable reservoir containing a piston that divides the reservoir into an active agent containing chamber and a water-swallowable agent containing chamber, wherein the water-swallowable agent containing chamber is provided with an outlet which accommodates said membrane.

53. (Currently Amended) The rate controlling membrane for an implantable drug delivery device characterized by being subjected to an elevated temperature of about 45° C to about 80° C for a predetermined period of from about ~~1~~ to 1 to about 75 hours and subsequently incorporated into the drug delivery device.

Cancel claim 54.

55. (Previously Presented) A rate controlling membrane for an implantable drug delivery device with decreased variability of water uptake from membrane to membrane.

56. (Currently Amended) A rate controlling membrane for an implantable drug delivery device characterized by being subjected to an elevated temperature of about 55° C—~~75C~~ to about 75° C for a predetermined period of about 12 —48 hours wherein the membrane comprises a material selected from the group consisting of a polyurethane and a polyether blocked amide copolymer.

57. (Previously Presented) A method for processing rate controlling membranes used in implantable drug delivery devices comprising:

- a) allowing the membrane to relax at room temperature for about 12 hours to 7 days before being subjected to elevated temperature;
- b) exposing the membrane to a predetermined temperature of from about 45° C to about 80°C;
- c) maintaining the membrane at the predetermined temperature for a period of time of from about 1 to 250 hours; and
- d) incorporating said membrane into a controlled drug delivery device.

58. (Previously Presented) A method for processing rate controlling membranes used in implantable drug delivery devices comprising:

- a) allowing the membrane to relax at room temperature for about 12 hours to 7 days before being subjected to elevated temperature;
- a) exposing the membrane to a predetermined temperature of from about 45° C to about 80°C;
- b) maintaining the membrane at the predetermined temperature for a period of time of from about 1 to 75 hours; and
- c) incorporating said membrane into a controlled drug delivery device.

59. (Previously Presented) The rate controlling membrane according to claim 3 wherein the membrane comprises a polyether blocked amide copolymer.

60. (Previously Presented) An annealed rate controlling membrane for an implantable drug delivery device wherein the annealed membrane exhibits more stable water uptake and more stable water permeability than a non-annealed membrane.

61. (Previously Presented) An annealed rate controlling membrane for an implantable drug delivery device wherein the annealing process decreases the variability of water uptake from membrane to membrane over time.

62-63. (Canceled)

64. (Previously Presented) The rate controlling membrane according to claim 12, wherein the drug containing chamber comprises leuprolide.